850 - Purchase Order

Author: DOT FOODS, INC.

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850 Purchase Order

Functional Group=PO

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Transaction Set (850) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the placement of purchase orders for goods and services. This transaction set should not be used to convey purchase order changes or purchase order acknowledgment information.

Not Defined:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes
	ISA	Interchange Control Header	M	1		
	GS	Functional Group Header	M	1		

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes
010	ST	Transaction Set Header	M	1		
020	BEG	Beginning Segment for Purchase Order	M	1		
150	DTM	Date/Time Reference	M	10		
240	TD5	Carrier Details (Routing Sequence/Transit Time)	M	12		
LOOP ID - N9					**1000**	
295	N9	Reference Identification	O	1		
300	MSG	Message Text	O	1000		
LOOP ID - N1					**200**	
310	N1	Name	M	1		
310	N1	Name	M	1		
340	N4	Geographic Location	M	>1		

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes
LOOP ID - PO1					**100000**	**N2/010L**
010	PO1	Baseline Item Data	M	1		N2/010
LOOP ID - PID					**1000**	
050	PID	Product/Item Description	M	1		
090	PO4	Item Physical Details	O	>1		
100	REF	Reference Identification	O	>1		

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes
LOOP ID - CTT					**1**	**N3/010L**
010	CTT	Transaction Totals	O	1		N3/010
030	SE	Transaction Set Trailer	M	1		

Not Defined:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes
	GE	Functional Group Trailer	M	1		
	IEA	Interchange Control Trailer	M	1		

Notes:

2/010L   PO102 is required.

2/010   PO102 is required.

3/010L   The number of line items (CTT01) is the accumulation of the number of PO1 segments. If used, hash total (CTT02) is the sum of the value of quantities ordered (PO102) for each PO1 segment.

3/010   The number of line items (CTT01) is the accumulation of the number of PO1 segments. If used, hash total (CTT02) is the sum of the value of quantities ordered (PO102) for each PO1 segment.

ISA Interchange Control Header

			Pos:	Max: 1
			Not Defined - Mandatory	
			Loop: N/A	**Elements: 16**

Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA01	I01	**Authorization Information Qualifier**	M	ID	2/2	Must use	1

Description: Code to identify the type of information in the Authorization Information

Code **Name**

00   No Authorization Information Present (No Meaningful Information in I02)

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA02	I02	**Authorization Information**	M	AN	10/10	Must use	1

Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA03	I03	**Security Information Qualifier**	M	ID	2/2	Must use	1

Description: Code to identify the type of information in the Security Information

Code **Name**

00   No Security Information Present (No Meaningful Information in I04)

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA04	I04	**Security Information**	M	AN	10/10	Must use	1

Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA05	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use	1

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA06	I06	**Interchange Sender ID**	M	AN	15/15	Must use	1

Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA07	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use	1

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

Code **Name**

08   UCC EDI Communications ID (Comm ID)

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA08	I07	**Interchange Receiver ID**	M	AN	15/15	Must use	1

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
		Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them					
		Dot Foods: *9288030000*					
ISA09	I08	**Interchange Date**	M	DT	6/6	Must use	1
		Description: Date of the interchange					
ISA10	I09	**Interchange Time**	M	TM	4/4	Must use	1
		Description: Time of the interchange					
ISA11	I10	**Interchange Control Standards Identifier**	M	ID	1/1	Must use	1
		Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer **All valid standard codes are used.**					
ISA12	I11	**Interchange Control Version Number**	M	ID	5/5	Must use	1
		Description: Code specifying the version number of the interchange control segments					

Code **Name**

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Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA13	I12	**Interchange Control Number**	M	N0	9/9	Must use	1
		Description: A control number assigned by the interchange sender					
ISA14	I13	**Acknowledgment Requested**	M	ID	1/1	Must use	1
		Description: Code sent by the sender to request an interchange acknowledgment (TA1)					

Code **Name**

0   No Acknowledgment Requested

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA15	I14	**Usage Indicator**	M	ID	1/1	Must use	1
		Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information					

Code **Name**

P   Production Data

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ISA16	I15	**Component Element Separator**	M		1/1	Must use	1
		Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator					

GS Functional Group Header

<table>
<tr><td>Pos:</td><td>Max: 1</td></tr>
<tr><td colspan="2">Not Defined - Mandatory</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 8</td></tr>
</table>

Purpose: To indicate the beginning of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GS01	479	**Functional Identifier Code**	M	ID	2/2	Must use	1

Description: Code identifying a group of application related transaction sets

Code Name

PO   Purchase Order (850)

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GS02	142	**Application Sender's Code**	M	AN	2/15	Must use	1

Description: Code identifying party sending transmission; codes agreed to by trading partners

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GS03	124	**Application Receiver's Code**	M	AN	2/15	Must use	1

Description: Code identifying party receiving transmission; codes agreed to by trading partners

Dot Foods: *9288030000*

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GS04	373	**Date**	M	DT	8/8	Must use	1

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GS05	337	**Time**	M	TM	4/8	Must use	1

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GS06	28	**Group Control Number**	M	N0	1/9	Must use	1

Description: Assigned number originated and maintained by the sender

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GS07	455	**Responsible Agency Code**	M	ID	1/2	Must use	1

Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

Code Name

X   Accredited Standards Committee X12

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GS08	480	**Version / Release / Industry Identifier Code**	M	AN	1/12	Must use	1

Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number;

positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed

Code   **Name**

004010   Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

ST Transcription Set Header

Pos: 010   Max: 1
Heading - Mandatory
Loop: N/A   Elements: 2

Purpose: To indicate the start of a transaction set and to assign a control number

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use	1

Description: Code uniquely identifying a Transaction Set

Code **Name**

850   Purchase Order

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use	1

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

BEG Beginning Segment for Purchase Order

Pos: 020   Max: 1
Heading - Mandatory
Loop: N/A   Elements: 4

Purpose: To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
BEG01	353	**Transaction Set Purpose Code**	M	ID	2/2	Must use	1

Description: Code identifying purpose of transaction set

Code	Name
00	Original

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
BEG02	92	**Purchase Order Type Code**	M	ID	2/2	Must use	1

Description: Code specifying the type of Purchase Order

Code	Name
DS	Dropship
NE	New Order

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
BEG03	324	**Purchase Order Number**	M	AN	1/22	Must use	1

Description: Identifying number for Purchase Order assigned by the orderer/purchaser

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
BEG05	373	**Date**	M	DT	8/8	Must use	1

Description: Date expressed as CCYYMMDD

Semantics:

1. BEG05 is the date assigned by the purchaser to purchase order.

DTM Date/Time Reference

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Must use	1

Description: Code specifying type of date or time, or both date and time

Code	Name
002	Delivery Requested

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
DTM02	373	**Date**	M	DT	8/8	Used	1

Description: Date expressed as CCYYMMDD

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 240   **Max: 12**
Heading - Mandatory
Loop: N/A   **Elements: 1**

Purpose: To specify the carrier and sequence of routing and provide transit time information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
TD504	91	**Transportation Method/Type Code**	M	ID	1/2	Used	1

Description: Code specifying the method or type of transportation for the shipment

Code	Name
H	Customer Pickup
M	Motor (Common Carrier)

Syntax Rules:

1. R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2. C0203 - If TD502 is present, then TD503 is required.
3. C0708 - If TD507 is present, then TD508 is required.
4. C1011 - If TD510 is present, then TD511 is required.
5. C1312 - If TD513 is present, then TD512 is required.
6. C1413 - If TD514 is present, then TD513 is required.
7. C1512 - If TD515 is present, then TD512 is required.

Semantics:

1. TD515 is the country where the service is to be performed.

Comments:

1. When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

N9 Reference Identification

Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N901	128	**Reference Identification Qualifier**	M	ID	2/3	Must use	1

Description: Code qualifying the Reference Identification

All valid standard codes are used.

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N902	127	**Reference Identification**	O	AN	1/30	Used	1

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N903	369	**Free-form Description**	O	AN	1/45	Used	1

Description: Free-form descriptive text

Dot Foods: *Please include phone number of buyer or other contact on all drop ship orders.*

Syntax Rules:

1. R0203 - At least one of N902 or N903 is required.
2. C0605 - If N906 is present, then N905 is required.

Semantics:

1. N906 reflects the time zone which the time reflects.
2. N907 contains data relating to the value cited in N902.

MSG   Message Text

Purpose: To provide a free-form format that allows the transmission of text information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
MSG01	933	**Free-Form Message Text**	M	AN	1/264	Must use	1

Description: Free-form message text

Syntax Rules:

1. C0302 - If MSG03 is present, then MSG02 is required.

Semantics:

1. MSG03 is the number of lines to advance before printing.

Comments:

1. MSG02 is not related to the specific characteristics of a printer, but identifies top of page, advance a line, etc.
2. If MSG02 is "AA - Advance the specified number of lines before print" then MSG03 is required.

N1 Name

Purpose: To identify a party by type of organization, name, and code

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use	1

Description: Code identifying an organizational entity, a physical location, property or an individual

Code **Name**

BT   Bill-to-Party

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N102	93	**Name**	M	AN	1/60	Used	1

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N103	66	**Identification Code Qualifier**	M	ID	1/2	Used	1

Description: Code designating the system/method of code structure used for Identification Code (67)

Code **Name**

9   D-U-N-S+4, D-U-N-S Number with Four Character Suffix

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N104	67	**Identification Code**	M	AN	2/80	Used	1

Description: Code identifying a party or other code

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

N1 Name

Pos: 310   Max: 1
Heading - Mandatory
Loop: N1   Elements: 4

Purpose: To identify a party by type of organization, name, and code

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use	1

Description: Code identifying an organizational entity, a physical location, property or an individual

Code	Name
ST	Ship To

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N102	93	**Name**	M	AN	1/60	Used	1

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N103	66	**Identification Code Qualifier**	M	ID	1/2	Used	1

Description: Code designating the system/method of code structure used for Identification Code (67)

Code	Name
9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix

Dot Foods:

DUNS+4 number for regular orders.

Code	Name
92	Assigned by Buyer or Buyer's Agent

Dot Foods:

Store code for drop ship orders.

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N104	67	**Identification Code**	M	AN	2/80	Used	1

Description: Code identifying a party or other code

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

N4 Geographic Location

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
N401	19	**City Name**	M	AN	2/30	Used	1
		Description: Free-form text for city name					
N402	156	**State or Province Code**	M	ID	2/2	Used	1
		Description: Code (Standard State/Province) as defined by appropriate government agency					
N403	116	**Postal Code**	M	ID	3/15	Used	1
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)					

Syntax Rules:

1. C0605 - If N406 is present, then N405 is required.

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

PO1 Baseline Item Data

Purpose: To specify basic and most frequently used line item data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO102	330	**Quantity Ordered**	M	R	1/15	Used	1

Description: Quantity ordered

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO103	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Used	1

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

All valid standard codes are used.

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO104	212	**Unit Price**	O	R	1/17	Used	1

Description: Price per unit of product, service, commodity, etc.

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO106	235	**Product/Service ID Qualifier**	O	ID	2/2	Used	1

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code	Name
UA	U.P.C./EAN Case Code (2-5-5)
UK	U.P.C./EAN Shipping Container Code (1-2-5-5-1)

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO107	234	**Product/Service ID**	O	AN	1/48	Used	1

Description: Identifying number for a product or service

Dot Foods: *UPC Case Code - can accept 12 or 14 digits*

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO108	235	**Product/Service ID Qualifier**	O	ID	2/2	Used	1

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code	Name
PI	Purchaser's Item Code

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO109	234	**Product/Service ID**	O	AN	1/48	Used	1

Description: Identifying number for a product or service

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO110	235	**Product/Service ID Qualifier**	O	ID	2/2	Used	1

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code	Name
MG	Manufacturer's Part Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO111	234	**Product/Service ID**	O	AN	1/48	Used	1

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
		Description: Identifying number for a product or service					
PO112	235	**Product/Service ID Qualifier**	O	ID	2/2	Used	1
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)					

Code Name

VN   Vendor's (Seller's) Item Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO113	234	**Product/Service ID**	O	AN	1/48	Used	1
		Description: Identifying number for a product or service					
		Dot Foods: *Dot's item number*					

Syntax Rules:

1. C0302 - If PO103 is present, then PO102 is required.
2. C0504 - If PO105 is present, then PO104 is required.
3. P0607 - If either PO106 or PO107 is present, then the other is required.
4. P0809 - If either PO108 or PO109 is present, then the other is required.
5. P1011 - If either PO110 or PO111 is present, then the other is required.
6. P1213 - If either PO112 or PO113 is present, then the other is required.
7. P1415 - If either PO114 or PO115 is present, then the other is required.
8. P1617 - If either PO116 or PO117 is present, then the other is required.
9. P1819 - If either PO118 or PO119 is present, then the other is required.
10. P2021 - If either PO120 or PO121 is present, then the other is required.
11. P2223 - If either PO122 or PO123 is present, then the other is required.
12. P2425 - If either PO124 or PO125 is present, then the other is required.

Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. PO101 is the line item identification.
3. PO106 through PO125 provide for ten different product/service IDs per each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

PID   Product/Item Description

Purpose: To describe a product or process in coded or free-form format

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PID01	349	**Item Description Type**	M	ID	1/1	Must use	1

Description: Code indicating the format of a description

Code Name

F   Free-form

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PID05	352	**Description**	M	AN	1/80	Used	1

Description: A free-form description to clarify the related data elements and their content

Syntax Rules:

1. C0403 - If PID04 is present, then PID03 is required.
2. R0405 - At least one of PID04 or PID05 is required.
3. C0703 - If PID07 is present, then PID03 is required.
4. C0804 - If PID08 is present, then PID04 is required.
5. C0905 - If PID09 is present, then PID05 is required.

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

PO4 Item Physical Details

Purpose: To specify the physical qualities, packaging, weights, and dimensions relating to the item

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
PO401	356	**Pack**	O	N0	1/6	Used	1

Description: The number of inner containers, or number of eaches if there are no inner containers, per outer container

PO402	357	**Size**	O	R	1/8	Used	1

Description: Size of supplier units in pack

PO403	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Used	1

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

All valid standard codes are used.

Syntax Rules:

1. P0203 - If either PO402 or PO403 is present, then the other is required.
2. C0506 - If PO405 is present, then PO406 is required.
3. P0607 - If either PO406 or PO407 is present, then the other is required.
4. P0809 - If either PO408 or PO409 is present, then the other is required.
5. C1013 - If PO410 is present, then PO413 is required.
6. C1113 - If PO411 is present, then PO413 is required.
7. C1213 - If PO412 is present, then PO413 is required.
8. L13101112 - If PO413 is present, then at least one of PO410, PO411 or PO412 is required.
9. C1716 - If PO417 is present, then PO416 is required.
10. C1804 - If PO418 is present, then PO404 is required.

Semantics:

1. PO415 is used to indicate the relative layer of this package or range of packages within the layers of packaging. Relative Position 1 (value R1) is the innermost package.
2. PO416 is the package identifier or the beginning package identifier in a range of identifiers.
3. PO417 is the ending package identifier in a range of identifiers.
4. PO418 is the number of packages in this layer.

Comments:

1. PO403 - The "Unit or Basis for Measure Code" in this segment position is for purposes of defining the pack (PO401) /size (PO402) measure which indicates the quantity in the inner pack unit. For example: If the carton contains 24 12-Ounce packages, it would be described as follows: Data element 356 = "24"; Data element 357 = "12"; Data element 355 = "OZ".
2. PO413 defines the unit of measure for PO410, PO411, and PO412.

REF   Reference Identification

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use	1

Description: Code qualifying the Reference Identification

Dot Foods: *Optional (used for cross-dock)*

Code	Name
CO	Customer Order Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
REF02	127	**Reference Identification**	O	AN	1/30	Used	1

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Dot Foods: *Optional (used for cross-dock)*

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Semantics:

1. REF04 contains data relating to the value cited in REF02.

CTT   Transaction Totals

Purpose: To transmit a hash total for a specific element in the transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
CTT01	354	**Number of Line Items**	M	N0	1/6	Must use	1

Description: Total number of line items in the transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
CTT02	347	**Hash Total**	O	R	1/10	Used	1

Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed.   .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. --------- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE Transaction Set Trailer

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
SE01	96	**Number of Included Segments**	M	N0	1/10	Must use	1
		Description: Total number of segments included in a transaction set including ST and SE segments					
SE02	329	**Transaction Set Control Number**	M	AN	4/9	Must use	1
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set					

Comments:

1. SE is the last segment of each transaction set.

GE Functional Group Trailer

Purpose: To indicate the end of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
GE01	97	**Number of Transaction Sets Included**	M	N0	1/6	Must use	1
		Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element					
GE02	28	**Group Control Number**	M	N0	1/9	Must use	1
		Description: Assigned number originated and maintained by the sender					

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA Interchange Control Trailer

Pos:		Max: 1
Not Defined - Mandatory		
Loop: N/A		Elements: 2

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage	Rep
IEA01	I16	**Number of Included Functional Groups**	M	N0	1/5	Must use	1
		Description: A count of the number of functional groups included in an interchange					
IEA02	I12	**Interchange Control Number**	M	N0	9/9	Must use	1
		Description: A control number assigned by the interchange sender					